13 April 1964

MEMORANDUM FOR: Chief, TID

THROUGH : Assistant for Plans and Development

ATTENTION : [redacted] 25X1

REFERENCE : Memorandum for the Record, TID/TAB - 64/64, dated 1 April 1964

SUBJECT : Stereoscopic Point Transfer Device

1. On 7 April 1964 a meeting was held in P&DS [redacted] 25X1

[redacted] 25X1

2. Discussions were held concerning the questions expressed by TID/TAB under paragraph 2 of the reference. These questions were clarified and/or resolved in the following manner:

a. Under paragraph 2a, TAB/TID expressed doubts of the measurement accuracy obtainable on the SPTD and asked for a more detailed system analysis incorporating a more definitive accuracy statement. The required information was presented in the form of a new, detailed proposal just recently received [redacted] It was generally agreed that the contractor should be able to approach the stated accuracies and thereby provide a very useful comparator capability. It was tentatively agreed that P&DS should accept [redacted] latest proposal [redacted] Product Improvement Utilizing [redacted] Encoders", dated 27 March 1964 and proceed with the development of a measuring system intended for "on-line" use. 25X1 25X1 25X1 25X1

b. Under item 2b, TID raised the question of incorporating hand wheels in addition to the joystick control [redacted] presented a detailed explanation and background information to document the logical basis for the joystick control approach. [redacted] explained that while handwheels are excellent for monoscopic-comparators, they leave a great deal to be desired for stereo-comparator use. Two hands are required to provide a vectorial motion with hand wheels in a monoscopic situation; while, vectorial motion, resulting from the dual plate motion inherent in stereo-comparators, actually requires 4 hand operation. The joystick 25X1 25X1

system is designed to alleviate this problem. In addition, it was pointed out that, because of the unique nature of the stepping motor drive, the response of this joystick system should be considerably more sensitive than previous systems. It was stressed that, if TID/TAB was still committed to them, handwheels could be provided; however [redacted] recommended that we go ahead with the present joystick concept and objectively evaluate it; since, from an R&D standpoint, this is an area we must investigate for possible use in future equipments. After evaluation, if TID is not satisfied with the sensitivity of the system, handwheels would be incorporated as a retrofit package. While this approach has disadvantages, it must be understood that to incorporate handwheels at this late date would require a change in scope of the contract with accompanying higher costs and delays in delivery. Changes in scope often result in giving the contractor an opportunity to renegotiate the total contract, at considerably higher cost to the Government. It was decided that for this item, a decision would be held in abeyance [redacted]

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c. Item 2c of the reference is no longer applicable since the contractor is currently not contemplating using this approach. The joystick presently under consideration should be considerably simpler in concept and function.

d. In respect to item 2d, P&ES will make every reasonable effort to continue to coordinate decisions with the personnel of TID/TAB and to have their personnel inspect the equipment components in the earliest possible stages of their development. We will notify TAB/TID in sufficient time to permit TID personnel to accompany monitors on inspection trips.

[redacted]

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